

CLAIMS AS AMENDED HEREIN
WITH STATUS IDENTIFIERS AND MARKINGS TO SHOW CHANGES

The following claims replace all prior versions of the claims in this application:

We claim:

1 **Claim 1 (currently amended):** A method of measuring the concentration of nitric oxide in a
2 range of 5 to 200 ppb ~~an analyte~~ in a gas sample of exhaled breath, said method comprising:
3 providing a first disposable sensor, said first sensor comprising a sensing element
4 comprising cytochrome-c in a sol-gel, wherein said sensing element undergoes a
5 change in the presence of 5 to 200 ppb of nitric oxide ~~said analyte~~;
6 loading said first sensor into a gas analysis device;
7 measuring the concentration of nitric oxide ~~said analyte~~ in an exhaled breath sample
8 using said first disposable sensor and said gas analysis device;
9 removing said first disposable sensor from said device; and
10 installing a second disposable sensor into said device, said second disposable sensor
11 likewise comprising a sensing element comprising cyrochrome-c and a sol-gel
12 and undergoing a change in the presence of 5 to 200 ppb of nitric oxide.

1 **Claim 2 (currently amended):** The method according to claim 1, wherein said first and second
2 disposable sensors are ~~sensor is~~ within a disposable housings ~~housing~~.

1 **Claim 3 (original):** The method according to claim 1, wherein said change is a change in an
2 optically quantifiable characteristic.

1 **Claims 4-6 (canceled)**

1 **Claim 7 (currently amended):** The method according to claim 1, further comprising wherein
2 the step of measuring the concentration of an analyte in a gas sample using said disposable

3 ~~sensor and said gas analysis device comprises~~ employing means for ensuring that extraneous
4 signals do not interfere with measurement of nitric oxide.

1 **Claim 8 (original):** The method according to claim 7, wherein said means for ensuring that
2 extraneous signals do not interfere with measurement comprises two separate channels for
3 analysis of the gas, wherein one of said channels is used for reference analysis.

1 **Claim 9 (original):** The method according to claim 7, wherein said means for ensuring that
2 extraneous signals do not interfere with measurement comprises using two separate sensing
3 elements for analysis of the gas, wherein one of said elements is used for reference analysis.

1 **Claim 10 (original):** The method according to claim 1, additionally comprising conditioning the
2 gas sample before measurement.

1 **Claim 11 (original):** The method according to claim 1, wherein said first disposable sensor uses
2 calibration information associated with said sensor.

1 **Claims 12-17 (canceled)**

2 **Claim 18 (currently amended):** A ~~disposable sensor for use with a device for quantifying that~~
3 ~~quantifies~~ the concentration of nitric oxide in a range of 5 to 200 ppb in an analyte in a gaseous
4 sample of exhaled breath, said device comprising:

5 a disposable sensing element comprising cytochrome-c in a sol-gel and having a nitric
6 oxide measurement range of 5 to 200 ppb; and
7 an interface means for interfacing said disposable sensing element sensor with the
8 remainder of said device.

1 **Claim 19 (currently amended):** The ~~device of sensor according to~~ claim 18, wherein said
2 interface means comprises a means for aligning to align an optical window in said disposable
3 sensing element sensor with an optical transducer appropriate location or locations on said
4 device.

1 **Claim 20 (currently amended):** The device of sensor according to claim 18, wherein said
2 disposable sensing element generates an electrical signal and said interface means comprises a
3 means to align electrical contacts on associated with said disposable sensing element sensor with
4 electrical contacts on the remainder of an appropriate location or locations on said device.

1 **Claim 21 (currently amended):** The sensor according to claim 18, wherein said interface
2 means comprises a slot in said device and a guide in said disposable sensing element sensor.

1 **Claim 22 (currently amended):** A kit for determining analyzing the concentration of nitric
2 oxide an analyte in a sample of exhaled breath in which said nitric oxide is present in an amount
3 ranging from 5 to 200 ppb, said kit comprising:
4 a plurality of disposable sensors, wherein said sensors comprise cytochrome-c in a sol-gel
5 having a nitric oxide response range of 5 to 200 ppb include a disposable sensing
6 element responsive to said analyte;
7 a gas analysis device for use with said sensors, said device comprising means for
8 receiving exhaled breath and converting said response to a measurable signal
9 measuring the concentration of said analyte in said exhaled breath.

1 **Claims 23-27 (canceled)**

1 **Claim 28 (withdrawn):** A sensor for use with a device that quantifies the concentration of an
2 analyte in a gaseous sample of exhaled breath, comprising:
3 a sensing element; and
4 a use limitation means.

1 **Claim 29 (withdrawn):** The sensor according to claim 28, wherein said use limitations means
2 comprises a means for preventing or discouraging use of the sensor after it has been used a
3 certain number of times.

1 **Claim 30 (withdrawn):** The sensor according to claim 29, wherein said certain number of times
2 is thirty.

1 **Claim 31 (withdrawn):** The sensor according to claim 29, wherein said certain number of times
2 is one.

1 **Claim 32 (withdrawn):** The sensor according to claim 28, wherein said use limitations means
2 comprises a means for preventing or discouraging use of the sensor after an expiration date.

1 **Claim 33 (withdrawn):** The sensor according to claim 28 or 32, wherein said use limitations
2 means comprises an information storage device.

1 **Claim 34 (withdrawn):** The sensor according to claim 33, wherein said information storage
2 device comprises an integrated circuit.

1 **Claim 35 (withdrawn):** The sensor according to claim 33, wherein said information storage
2 device comprises a magnetic strip.

1 **Claim 36 (withdrawn):** The sensor according to claim 28, wherein said use limitation means
2 comprises a means for preventing or discouraging use of the sensor after it has once been
3 removed from a gas analysis device.

1 **Claim 37 (withdrawn):** The sensor according to claim 36, wherein said use limitations means
2 comprises a tab.

1 **Claim 38 (withdrawn):** The sensor according to claim 36, wherein said use limitations means
2 comprises a fuse.

1 **Claim 39 (withdrawn):** The sensor according to claim 36, wherein said use limitations means
2 comprises a means for detecting a leak within said sensor.

1 **Claim 40 (withdrawn):** A disposable sensor for quantifying the concentration of an analyte in a
2 gaseous sample of exhaled breath, comprising:

3 a housing;

4 a disposable sensing element within said housing; and

5 a port in said housing for entry of said gaseous sample of exhaled breath; and
6 means for sealing said port until it is time for the sensor to receive the gas sample of
7 exhaled breath.

1 **Claim 41 (withdrawn):** The sensor according to claim 40, wherein said means for sealing said
2 port is a puncturable cover.

1 **Claim 42 (withdrawn):** The sensor according to claim 40, additionally comprising:
2 a second port in said housing for exit of said gaseous sample of exhaled breath; and
3 means for sealing said second port until it is time for the sensor to receive a gas sample of
4 exhaled breath.

1 **Claim 43 (withdrawn):** The sensor according to claim 42, wherein said means for sealing said
2 second port is a second puncturable cover.

1 **Claim 44 (canceled)**

1 **Claim 45 (currently amended):** The device of sensor according to claim 18 44, further
2 comprising wherein said means for means for accounting for the effect of interfering signals
3 comprises two gas cells, one containing said disposable sensing element and the other containing
4 a second said sensing element and means for selectively removing said nitric oxide from
5 exposure to said second sensing element within said housing.

1 **Claim 46 (canceled)**

1 **Claim 47 (withdrawn):** A sensor for use with a device that quantifies the concentration of an
2 analyte in a gaseous sample of exhaled breath, comprising:
3 a housing;
4 a disposable sensing element within said housing; and
5 a first sample conditioning unit within said housing.

1 **Claim 48 (withdrawn):** The sensor according to claim 47, wherein said sample conditioning
2 unit comprises zeolite (5A or 13x), a silica gel, or another desiccant.

1 **Claim 49 (withdrawn):** The sensor according to claim 47, wherein said sample conditioning
2 comprises potassium permanganate combined with charcoal or zeolite 3A.

1 **Claim 50 (withdrawn):** The sensor according to claim 47, additionally comprising a second
2 sample conditioning unit, wherein said first sample conditioning unit is for use in measuring a
3 first analyte, and said second sample conditioning unit is for use in measuring a second analyte.

1 **Claim 51 (withdrawn):** A sensor for use with a device that quantifies the concentration of an
2 analyte in a gaseous sample of exhaled breath, comprising:
3 a housing;
4 a disposable sensing element within said housing; and
5 a means for limiting the rate of diffusion of said sample.

1 **Claim 52 (withdrawn):** The sensor according to claim 51, wherein said means for limiting the
2 rate of diffusion comprises a diffusion port.

1 **Claim 53 (withdrawn):** A disposable sensor for use with a device that quantifies the
2 concentration of an analyte in a gaseous sample of exhaled breath, comprising:
3 a disposable sensing element; and
4 calibration information associated with said sensing element.

1 **Claim 54 (withdrawn):** The sensor according to claim 53, wherein said calibration information
2 comprises text for reading by a user.

1 **Claim 55 (withdrawn):** The sensor according to claim 54, wherein said text comprises a code.

1 **Claim 56 (withdrawn):** The sensor according to claim 54, wherein said text comprises a
2 coefficient table.

1 **Claim 57 (withdrawn):** The disposable sensor according to claim 53, wherein said calibration
2 information is stored in an integrated circuit associated with said sensing element.

1 **Claim 58 (withdrawn):** The disposable sensor according to claim 53, wherein said calibration
2 information is stored in a bar code associated with said sensing element.

1 **Claim 59 (withdrawn):** The disposable sensor according to claim 53, wherein said calibration
2 information is stored in an optical code associated with said sensing element.

1 **Claim 60 (withdrawn):** A package of disposable sensors, comprising:
2 a plurality of disposable sensors for use in analyzing exhaled breath; and
3 a storage compound placed near said sensors.

1 **Claim 61 (withdrawn):** The package according to claim 60, wherein said storage compound
2 comprises a desiccant.

1 **Claim 62 (withdrawn):** The package according to claim 60, wherein said storage compound
2 comprises a salt solution.

1 **Claim 63 (canceled)**

1 **Claim 64 (withdrawn):** A sensor for use with a device that quantifies the concentration of an
2 analyte in a gaseous sample of exhaled breath, comprising:
3 a housing with a transparent window;
4 a disposable sensing element within said housing; and
5 means for protecting said window from smudges or other optical interferents.

1 **Claim 65 (withdrawn):** The sensor according to claim 64, wherein said means for protecting
2 said window comprises placing said window in a recess in said housing.

1 **Claim 66 (withdrawn):** The sensor according to claim 64, wherein said means for protecting
2 said window comprises a protective covering over said window.